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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,044	06/09/2000	Christopher J. Duguay	SYNER-164XX	2567

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EXAMINER

HUYNH, KIM T

ART UNIT PAPER NUMBER

2189

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/591,044

Applicant(s)

DUGUAY ET AL.

Examiner

Kim T. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,5,6 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Trieu et al. (U.S Patent 5,925,135) in view of Carson et al. (U.S Patent 5,920,156)

a. As per claims 1 and 5, Trieu et al. teaches a system for transferring data between a plurality of devices communicably coupled to a bus (Specification, column 1, lines 23-30); the bus including at least one data line for transmitting the data and at least one clock line, the system comprising (Specification, column 1, lines 52-65): the system being operative at a first clock rate and at a second clock rate less than the first clock rate (Abstract); a first device communicably coupled to the bus (Specification, column 1, line 66 - column 2, line 1); and a second device communicably coupled to the bus (Specification, column 2, lines 2-9). The bus comprises an SMBus (Specification, column 1, lines 31- 40). Trieu et al. does not teach operative at least at the second clock rate to store at least a portion of the data in a register; and operative at least at the second clock rate to drive the clock line to a low logic level while the data is stored in the register of the first device. Carson et al. teaches operative at least at the second clock rate

to store at least a portion of the data in a register (Specification, column 5, line 61 - column 6, line 6); and operative at least at the second clock rate to drive the clock line to a low logic level while the data is stored in the register of the first device (Specification, column 8, lines 9-13). At the time the invention was made, it would be obvious to a person of ordinary skill in the art to include operative at least at the second clock rate to store at least a portion of the data in a register; and operative at least at the second clock rate to drive the clock line to a low logic level while the data is stored in the register of the first device as taught by Carson et al. in the method of Trieu et al. because the data needs to be stored, and it is efficient to store it in a register.

b. As per claim 2, Carson et al. disclose the claimed invention as described above in claim 1. Furthermore, Carson et al. teaches the first device is further operative at least at the second clock rate to clear the data from the register upon completion of a data transfer (Specification, column 8, lines 15-17).

c. As per claim 6, Carson et al. disclose the claimed invention as described above in claims 1 and 2. Furthermore, Carson et al. teaches the method comprising the steps of while the clock signal is being transmitted at least at the second clock rate, storing at least a portion of the data in a register communicably coupled to the bus (Specification, column 5, line 61 - column 6, line 6); and driving the clock line to a low logic level while the data is stored in the register (Specification, column 8, lines 9-13).

d. As per claim 7, Carson et al. disclose the claimed invention as described above in claims 1, 2, and 6. Furthermore, Carson et al. teaches including the step of clearing the data from the register upon completion of a data transfer (Specification, column 8, lines 15-17).

3. Claims 3, 4, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trieu et al. in view of Carson et al. as applied to claims 1 and 6 above, and further in view of Hamilton et al. (4,443,845).

a. As per claim 3, Trieu et al. in view of Carson et al. teaches a system for transferring data between a plurality of devices communicably coupled to a bus, the bus including at least one data line for transmitting the data and at least one clock line, the system comprising: the system being operative at a first clock rate and at a second clock rate less than the first clock rate; a first device communicably coupled to the bus and operative at least at the second clock rate to store at least a portion of the data in a register; and a second device communicably coupled to the bus and operative at least at the second clock rate to drive the clock line to a low logic level while the data is stored in the register of the first device. Trieu et al. in view of Carson et al. does not teach including pull-up circuitry for pulling the clock line to a high logic level, and wherein the second device is further operative to release the clock line upon completion of a data transfer to allow the clock line to be pulled-high by the pull-up circuitry. Hamilton et al. teaches including pull-up circuitry for pulling the clock line to a high logic level (Specification, column 50, lines 62-68); and wherein the second device is

further operative to release the clock line upon completion of a data transfer to allow the clock line to be pulled-high by the pull-up circuitry (Specification, column 51, line 38 - column 52, line 4). At the time the invention was made, it would be obvious to a person of ordinary skill in the art to include including pull-up circuitry for pulling the clock line to a high logic level, and wherein the second device is further operative to release the clock line upon completion of a data transfer to allow the clock line to be pulled-high by the pull-up circuitry as taught by Hamilton et al. in the method of Trieu et al. in view of Carson et al. because releasing the clock line allows devices to use it for other purposes.

b. As per claim 4, Hamilton et al. disclose the claimed invention as described above in claim 3. Furthermore, Hamilton et al. teaches including pull-up circuitry for pulling the clock line to a high logic level (Specification, column 50, lines 62-68); and wherein, upon completion of a data transfer, the first device is further operative to clear the data from the register (Specification, column 8, line 57 - column 9, line 22); and the second device is further operative to release the clock line to allow the clock line to be pulled high by the pull-up circuitry (Specification, column 51, line 38 - column 52, line 4).

c. As per claim 8, Hamilton et al. disclose the claimed invention as described above in claims 3 and 4. Furthermore, Hamilton et al. teaches the clock line is pulled to a high logic level by pull-up circuitry (Specification, column 50, lines 62-58); and further including the step of releasing the clock line upon completion of a

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data transfer to allow the clock line to be pulled-high by the pull-up circuitry (Specification, column 51, line 38 - column 52, line 4).

d. As per claim 9, Hamilton et al. disclose the claimed invention as described above in claims 3, 4, and 8. Furthermore, Hamilton et al. teaches the clock line is pulled to a high logic level by pull-up circuitry (Specification, column 50, lines 62-68); and further including the steps of, upon completion of a data transfer, clearing the data from the register (Specification, column 8, line 57 - column 9, line 22); and releasing the clock line to allow the clock line to be pulled-high by the pull-up circuitry (Specification, column 51, line 38 - column 52, line 4).

Response to Arguments

4. Applicant's arguments filed November 15, 2002 have been fully considered but they are not persuasive.

a. In response to applicant's argument that Carson reference has nothing to do with transmitting data between devices operating at different frequencies, nor it is concerned with data transmission between devices over a bus, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. In this case, Carson does disclose a communication interface transfers the coded over a bus. In addition, the condition of codes determine the transmitting rate. (col.5, lines 61-64)

b. In response to applicants' argument that Carson reference fails to disclose the operation of driving the clock line to a low logic^{col 8, 9-13} level while the data is stored in the register. However, Carson discloses the remote signaling and selection of each dimmer having a number corresponding to signal stored in memory is made independently of phase by sampling the logic value of remote input signal in relation to a zero cross signal of line. (col.6, lines 13-20). Furthermore, Carson discloses the microcontroller 50 includes the operating program allows data to be stored. (col.5, lines 24-30)

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7249 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

Jan. 23, 2003



SUMATI LEFKOWITZ
PRIMARY EXAMINER